HEARING OFFICER'S REPORT

Regarding: Delaware's Proposed Environmental Standards For Eligible Energy Resource Regulation

> Lisa A. Vest Hearing Officer

I. Background:

A public hearing was held on May 1, 2006 at the Delaware Energy Office, 146 South Governors Avenue, in Dover, Delaware, to receive public comment on a new regulation, *Environmental Standards for Eligible Energy Resources*", as required by Senate Bill 74, "Renewable Energy Portfolio Standards" (hereinafter referred to as "RPS"). The purpose of this regulation is to prescribe procedures relating to the Renewable Energy Portfolio Standards Act, pursuant to 26 <u>Del.C.</u> Ch. 1, Subchapter IIIA. This regulation prescribes environmental standards for hydroelectric facilities and for the combustion of biomass. These standards determine if a resource is an Eligible Energy Resource under the Act. These regulations are promulgated under authority of 26 <u>Del.C.</u> Ch. 1, §352(6) and 26 <u>Del.C.</u> Ch. 1, Section 1. Also affected by this proposed regulation is the Delaware Public Service Commission Regulation Docket 56.

Present at this public hearing on May 1, 2006, was Brian Gallagher, contractor from the Delaware Public Service Commission, who assisted the Delaware Energy Office with drafting this proposed regulation. Also present at the hearing were Bill and Roberta Glenn, private citizens from Seaford, Delaware, and Alan Muller, Executive Director of Green Delaware. Questions and comments from these members of the public, along with the Department's responses to the

same, will be fully addressed within this Report later below. Proper notice of the hearing was provided as required by law.

II. Summary of Record:

A. <u>Energy Office presentation:</u>

After entering the Department's exhibits into the record, Charlie Smisson, State Energy Coordinator of the Delaware Energy Office, gave a brief PowerPoint presentation to the public concerning this proposed regulation. Mr. Smisson explained that the standards which the Energy Office were tasked to develop in this matter arose from Senate Bill 74, which was the Renewable Energy Portfolio Standards Act. This Act was established so that suppliers, consumers, and the general public could obtain the benefits of renewable energy resources throughout the State. Such benefits include the following:

- Increased electric supply diversity
- Increased protection against price volatility and supply disruption
- Improved transmission and distribution performance
- New economic development opportunities
- Improved regional and local air quality
- Improved public health

The RPS Act itself requires electricity suppliers to supply a certain percentage of their total annual electricity sales in the State of Delaware from renewable energy resources. This percentage would increase incrementally from 1% in 2007 to 10% by 2019. Many other states

across the country have enacted similar programs, with some doing more and others doing less. Eligible renewable energy resources include solar electric power, wind energy, geothermal energy, ocean energy, fuel cells, small hydropower, landfill gas, and sustainable biomass. Specific to the scope of this particular public hearing (and to this regulation promulgation effort) were (1) small hydropower and (2) sustainable biomass, again, arising from the directives set forth for DNREC within the relevant portions of Senate Bill 74.

The RPS Act also establishes a market-based renewable energy credit trading system (REC) to allow flexibility by encouraging the regional exchange of electricity. It also establishes an alternative compliance payment method based on a "per kilowatt hour fee" if the utility cannot comply with the percentage increases. Moreover, it would also allow the Delaware Electric Co-operative to offer a renewable energy grant program similar to the Green Energy Program, currently run by DNREC and available to Delmarva customers.

The Delaware Public Service Commission has the primary responsibility to adopt the rules and regulations necessary to implement the provisions of this RPS Act, and is bound to do so no later than July 31, 2006. Sections 352(g) and (h) of the Act require DNREC to determine the environmental standards for electricity generated by hydroelectric facilities and the combustion of biomass. Again, the statutory boundaries with regard to DNREC's role in these regulations are

contained within Senate Bill 74, a copy of which is attached hereto as Exhibit "A" for the Secretary's review. As set forth in Sections 352(6)(g), and 352(6)(h), the *only* areas of this Act which are the subject of this promulgation are as follows:

- (g) Electricity generated by a hydroelectric facility that has a maximum design capacity of 30 megawatts or less from all generating units combined that meet appropriate environmental standards as determined by DNREC;
- (h) Electricity generated from the combustion of biomass that has been cultivated and harvested in a sustainable manner as determined by DNREC, and is not combusted to produce energy in a waste to energy facility or in an incinerator, as that term is defined in Title 7.

A copy of the Department's presentation given at the public hearing that night is attached for review as Exhibit "B".

B. Public Service Commission Discussion:

After Mr. Smisson concluded his presentation, Brian Gallagher of the Public Service Commission (PSC) provided some background information with regard to how these regulations were approached. Delaware is part of the regional power market, also referred to as the PJM Interconnection. PJM has a tracking system for the aforementioned renewable energy certificates (RECs), and it is through that system that PSC will be able to track the development of the RECs that are used to comply with the law (i.e., the electricity suppliers must have a certain number of RECs per year in order to be in compliance with current law). Mr. Gallagher went on to reiterate that DNREC's scope, insofar as its role in determining appropriate environmental standards for the Act in general, is quite narrow indeed in this matter, involved only in the small hydroelectric facilities and the electricity generated from biomass combustion, as noted above.

With regard to the small hydroelectric facilities referenced in the relevant portions of Senate Bill, Mr. Gallagher defined the same as any technology that produces electric power by harnessing the energy potential of moving water. The Low Impact Hydropower Institute is a nonprofit organization dedicated to reducing the impacts of hydroelectric generation through the certification of environmentally responsible, low-impact hydropower. Sections 4.1 through 4.6 of the proposed regulations in this matter are the requirements which are part of the Low Impact Hydropower Institute's certification standards, and the PSC must meet them. Additionally, in order to be a hydroelectric facility that can have a REC in Delaware, the facility must meet the certification standards of the Low Impact Hydropower Institute. Thus, since there are already a number of hydropower generators that are already certified by

these standards, there are generators which will be able to participate in the REC market here in Delaware once it begins in the near future.

With regard to the portion of Senate Bill 74 concerning biomass combustion, biomass is construed to mean organic matter that is available on a renewable or recurring basis, including timber, aquatic plants, dedicated energy crops¹, agricultural food and feed crop residues, forestry and timber residues, and lumber/pulp residue². eligible energy resource under the Act, the electricity generated for the biomass has to meet all federal, state, and local laws/regulations for land use, air emissions, use of cooling water, and ash management. For dedicated energy crops and agricultural food/feed crop residues, they must meet the standards of the USDA National Organic Program. In the event the particular kind of crop at issue does not have a USDA standard, then alternative actions as listed within the regulations themselves must be followed instead (i.e., follow all best management practices of local conservation districts and state/local cooperative extension services; develop all voluntary and/or mandatory state/local government nutrient management plans; and all other actions as set forth in these proposed regulations, attached here to as Exhibit "C" for the Secretary's review).

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¹ "Dedicated energy crops" means anything grown with the intention of using that material to produce energy.

With regard to the timber, forestry and timber residues, and non-cultivated wild plants, in order to be an eligible energy resource, it must implement a conservation of management plan that includes all the best management practices of State and local forestry services, using environmentally friendly non-mechanical methods, when possible, and limited use of pesticides and/or herbicides. If exotic species are used, they must be monitored, to ensure that they do not spread. Also, an avoidance of converting existing forest to plantations must occur, and old growth lumber (defined as a tree under 50 years old) is excluded.

C. Public Comment Discussion:

Alan Muller, Executive Director of Green Delaware, proceeded to voice his concerns and ask questions of both the Department and Mr. Gallagher from PSC during the public comment phase of this hearing. Mr. Muller began his comments with the statement that Green Delaware, along with the Sierra Club and other organizations (which were unnamed for the record) opposed Senate Bill 74, prior to its passage in the legislative, due to the fact that they believed it to be biased in favor of potentially harmful forms of "so-called" renewable energy. The Hearing Officer clarified for Mr. Muller at that time that the scope of this hearing was limited to only those things that Senate Bill 74 indicates are to be

² The term "residue" in general means organic matter by-products from the harvesting of these products, not necessarily the products themselves. In the case of lumber/pulp, it would have to be derived from timber that met all other standards.

determined by DNREC, which, as noted above, are subparts (g) and (h) of Section 352(6).

Mr. Muller wanted to know which organizations were contacted by the Department during the drafting stage of these regulations. Mr. Smisson replied that, although no workshops were held, the Energy Office attempted to reach out to as many persons as possible to make this promulgation effort know. Specifically, he personally sent Mr. Muller a copy of the proposed regulations and solicited comments from him prior to this hearing. Additionally, the Department utilized their inhouse sources, and the expertise of Mr. Gallagher from PSC, who assisted with the drafting effort of these regulations.

In response to Mr. Muller's questions regarding the hydroelectric facilities referenced in this regulation, both Mr. Smisson and Mr. Gallagher confirmed that there are currently no such facilities in Delaware, however, it is an eligible resource established in the RPS Act, and so standards regarding same had to be established therein. With regard to the references of the Low Income Hydropower Institute, Mr. Gallagher confirmed that it is not an industry group. There are a number of environmental organizations on their board, and the website for this entity was provided so that anyone interested would be able to go online and learn more about them.

Turning toward Section 4.0 of the proposed regulations, Mr. Muller raised a couple of specific questions with regard to 4.3, which states

that, in order to be an Eligible Energy Resource under the Act, a hydroelectric facility shall "[p]rovide an adequate water flow for protection of aquatic life and for safe and effective fish passage". Mr. Muller wished to know whether any divisions of DNREC have regulations specific to safe and effective fish passage, since initially Mr. Smisson advised that the various divisions of DNREC (i.e., Division of Soil and Water, Division of Parks and Recreation, Division of Fish and Wildlife) all have rules and regulations that would have to be followed in this case. Since no one from those Divisions of the Department was present at the hearing, Mr. Smisson offered to obtain this information for Mr. Muller and provide it to him as soon as possible. Mr. Muller went on to state that, due to the fact that it is doubtful to him that Delaware has a regulatory framework designed to determine criteria adequacy on such hydropower facilities, he believes the Department should look more closely at this issue.

Continuing on with this thought, Mr. Muller also raised the language contained in Section 4.2, specifically, "...not diminish water quality and/or adversely impact watershed". In response to Mr. Muller's question of what that language specifically means, Mr. Smisson replied that, although it was not his realm of experience, he would obtain that information for him from the appropriate DNREC Division. Mr. Smisson confirmed that, indeed, the other Divisions of DNREC did review these regulations, and the Energy Office received no comment from any of

them. Mr. Muller then asked if there was any proof that the Divisions had no comment on these regulations.

At that point, the Hearing Officer interrupted and reminded Alan that, not only did the Energy Office solicit his input personally prior to the hearing, these proposed regulations were published for thirty (30) days, and at any time he could have contacted the Department with these questions, but he did not. The question was asked of Mr. Smisson as to whether any of the Divisions had comment on these proposed regulations, the question was answered, and therefore his questioning and comments regarding this promulgation matter as a whole should move along. Mr. Muller said that he would follow up in writing regarding his concerns with this particular section.

Turning toward Section 5.0, "Electricity Generated from the Combustion of Biomass", Mr. Muller's concerns were greater, as he believes the potential is there for such facilities to be built in Delaware, and this type of facility inherently produces emissions that could have a negative effect on air quality. Mr. Muller raised concerns over Section 352(6)(f) as contained in Senate Bill 74, however, he was reminded that that section was outside the scope of this hearing. During discussions regarding the biomass issue, Mr. Gallagher clarified that, as the regulations are written, if such a facility is currently meeting federal, state, and local government laws and regulations, then they would be allowed to participate in the REC market following meeting all of the rest

of the regulations promulgated in the proposed regulations. Mr. Smisson also followed up that statement by telling Mr. Muller that, through these proposed regulations and the regulations of the PSC, the Energy Office is ensuring that, in Delaware, you cannot combust or produce energy in a waste-to-energy facility, or in an incinerator. Mr. Gallagher further added that this would not happen in Delaware, nor would it happen in any other state, either, because they cannot be a certified eligible energy resource in that situation.

Mr. Muller then focused back upon the combustion of biomass, and opined that he is unsure whether it is possible to say that Delaware is ensuring or even seeking improved regional and local air quality or improved public health if there are no meaningful criteria in our regulations to ensure that these are not inherently dirty plants. This concern, according to Mr. Muller, is why they opposed Senate Bill 74 in the first place. Mr. Muller further stated that Green Delaware was not satisfied with the protective language contained therein, due to the fact they had no confidence that DNREC would implement the legislation in a way that was actually protected. In response, Mr. Smisson stated that he understood Mr. Muller's feelings on this issue, however, the Energy Office would have appreciated receiving such comments back when Mr. Muller was first given the opportunity to do so, instead of just coming to the hearing and making comments for the record.

In response to Mr. Muller's stated concerns that Section 5.1 does not provide assurance that the emissions of such a facility would be reasonable or low impact, or not have negative health and/or environmental consequences, Mr. Gallagher clarified for the record that these regulations were written from the emphasis that the statute gave to these sections. In Section 5.0, the statute gave emphasis on where the environmental improvement should be, as in the fuel source. Thus the reason why the fuel source was concentrated on, as there was nothing there from the statue regarding improved air emissions in that particular section.

With regard to the dedicated energy crops and feed crop residues, particularly, the section referencing "...meet the standards of the USDA National Organic Program or take all of the following actions...", Mr. Muller wanted to know from where the list of actions originated. In response, Mr. Gallagher stated that he reviewed other states' RPS regulations and laws, and then based upon his own judgment, applied these rules and regulations on agricultural crops and timber and forest activities and sought to make them better environmentally. In other words, if one does not go the organic route, the alternative would be to follow all of these "best practices", and that was the approach taken on the entirety of 5.0 when drafting these regulations. When asked by Mr. Muller which states' regulations were reviewed, Mr. Gallagher replied Pennsylvania, New Jersey, and Maryland (all states within the PJM). All

three states have RPS laws and have implemented regulations to the best of Mr. Gallagher's knowledge, with Maryland possibly having completed their process already. However, no other state law mentions sustainable biomass.

To serve as an example for Mr. Muller as to how a determination of compliance would be made, Mr. Gallagher offered the following scenario: An energy supplier that proposed to supply/sell RECs in Delaware would have to be certified by the PSC. They would make an application to the PSC, and the PSC would take a look at their application, go down their list, and say, "here is the supplier, here are the regulations promulgated by DNREC that you have to meet, and tell us how you meet all these regulations". As further clarification for Mr. Muller, Mr. Smisson stated that the PSC is charged with the enforcement of the actual regulation, whereas DNREC just developed the standards. Moreover, Mr. Gallagher explained to Mr. Smisson that DNREC cannot put into the PSC's regulations anything that would attempt to tell the PSC what to do.

Mr. Muller continued to ask for definitive statements and clarification on each subsection of 5.0. Mr. Smisson reminded Alan that the Department could have developed a very cumbersome set of standards when drafting these regulations, but they did not want to get into standards which are so stringent that compliance would be impossible. Simply put, DNREC is attempting to develop a set of standards based on other states' rules and regulations that are currently

working. Furthermore, DNREC believes that the proposed regulations are enforceable, as DNREC will advise the PSC when asked to do so, and concurs with the PSC's interpretation and their enforcement authorities as developed by Mr. Gallagher.

As the clarification process between Mr. Smisson, Mr. Gallagher, and Mr. Muller continued, discussion ensued on the definition of "sustainable". Mr. Smisson stated that he personally did not wish to use a dictionary definition of that term, but that he believed that everyone involved with this draft promulgation would agree that "sustainable" means "...something that in the area of biomass is grown in a productive, efficient method that meets all local agricultural standards". To that, Mr. Gallagher added, "...and grown in a way that it can be grown year after year without damaging the environment, substantially damaging or having an adverse affect". Mr. Muller stated that he fundamentally agreed with that definition, however, he does not believe that these regulations fully explain this, nor is there anything that says within these regulations that, if one complies with all existing policies and requirements, it will result in sustainable energy crops. Therefore, he believes that the regulation fails with regard to this issue. Mr. Smisson reminded Mr. Muller that, if the PSC would have concerns on these "sustainable" issues, then DNREC would be consulted for the same.

Mr. Muller then went to the concern of how, throughout the State of Delaware, the public is seeing situations where agriculture and forest

lands are being lost to development. He is greatly concerned that a developer could do a "one-shot deal", cut down a forest, pave it over, and still not be violating these regulations. In fact, Mr. Muller asked the Department whether they wished to subsidize such actions through DNREC's Energy policy, because in his opinion, that is what will occur should these regulations be promulgated, and again, another reason why he opposed Senate Bill 74 in the first place. Both Mr. Smisson and Mr. Gallagher advised that they would give that scenario further thought.

At that point, Mr. Muller concluded his comments, and offered again to interact with the Energy Office on resolving his questions. The Hearing Officer then requested that Mr. Muller provide all of his questions and comments, in writing, to the Department, by Friday of that week (the hearing was on Monday, May 1st, and thus that offer gave Mr. Muller the rest of the week to provide this documentation to the Department for inclusion into the record). Mr. Muller then requested a copy of the transcript. The Hearing Officer then obliged that request by offering Mr. Muller five (5) working days from the date the transcript was able to be placed in his hands. Mr. Muller agreed to this, and with that, he left the hearing.

Thereafter, Mr. Bill Glenn from Seaford, Delaware, wished to offer his comments for the record concerning this promulgation. He appreciated the Department's website, and stated that it was very informative. His one concern was the definition of "biomass" as listed within the regulations. Mr. Glenn stated that he applauded the renewable and recurring concept, and the intent of the environmentally friendly fuels. His concerns did not lay with the large companies and the smokestacks that exist, but rather with the small farmer, and competition between the electric companies and the oil companies, and finding ways to "make a dent" and offer some renewable alternatives. Going back to the definition of "biomass", he was concerned that if there are conflicting definitions, then it may restrict the ability of the renewable fuels that are made in a lot of different areas to be able to be sold and traded here.

Mr. Glenn also opined that there are many renewable energy sources here in Delaware that can be taken advantage of, especially in Sussex County. He suggested that if a lot of the dams and other controlled structures that already exist are utilized, we could harness other energies in that manner as well.

After Mr. Glenn concluded his comments, his wife, Roberta Glenn, had a question for Mr. Gallagher. Mrs. Glenn wanted to know whether there was any particular reason that DNREC was changing the definition of "biomass" from the way it is with other states. Mr. Gallagher replied that he could not speak as to why the legislature put the word "sustainable" in the law. Mrs. Glenn then clarified, stating that her comment wasn't an objection to the term "sustainable", but rather that it is so restrictive. She also noted that, if one reviews the Green E

program, there is a definition in there which most states have patterned their definitions after. And therefore she asked if the Department would take a look at it.

At that point, the Hearing Officer clarified for the record that the public record period of this hearing file would be held open, pending receipt of the hearing transcript from the court reporter. Once Mr. Muller had been given a copy of the transcript and had provided his concerns to the Department in writing, the matter of when the actual close the record would occur.

D. Post-Hearing Activities:

As promised at the time of the hearing, Mr. Smisson had promised to obtain some additional information concerning other DNREC Divisions' regulations regarding safe and effective passage of fish, as well as any other specific regulations concerning hydroelectric power. This information was provided directly to Mr. Muller via e-mail by Charlie Smisson on May 22, 2006. A electronic copy of the hearing transcript, also pursuant to Mr. Muller's request at the time of the hearing, was provided directly to him by the Hearing Officer. Given the fact that it had, at that point, been approximately three weeks since the date of the hearing itself, the Hearing Officer wrote to Mr. Muller on May 23, 2006, confirming that he was in receipt of all requested information, and gave him until close of business on Friday, May 26, 2006, to provide to Mr. Smisson any and all written questions and comments regarding this

matter. The Hearing Officer, in the same letter, further confirmed that, once Mr. Muller's written submission had been received, she would request the Energy Officer to formally respond to the same, in writing, within five (5) business days from the date of receipt of his submission.

Ultimately, the Energy Office provided to the Hearing Officer a final Memorandum regarding the interchange between Mr. Smisson and Mr. Muller. Of particular note is the fact that, despite all requests being honored by the Hearing Officer (i.e., requests for a copy of the full transcript, request for additional time to review and submit questions and comments for consideration), Mr. Muller never submitted any written questions and/or comments to the Department for further consideration in this matter. Those questions posed at the time of the hearing, and the answers provided to the same by the Department, are contained within the aforementioned Memorandum from Mr. Smisson, and that memorandum dated June 1, 2006, is attached hereto as Exhibit "D" for review.

III. Conclusions and Recommended Findings:

On the basis of the record developed in this matter, it appears that the Energy Office has provided a sound basis for the proposed Environmental Standards for Eligible Energy Resources Regulation. The Department has provided reasoned responses to the various comments they have received, and has worked well in concert with the Public Service Commission to develop these regulations as thoroughly and

consistently as possible. Upon review of the Energy Office's responses to

the public comments made in this matter, it appears as though the

Department's responses to the public on this issue were rational and

even-handed, and that the final draft of these proposed regulations is

reasonable and consistent with the record developed in this case.

Therefore, I recommend that the Department's proposed regulations be

promulgated in final form, in accordance with the customary and

established rule-making procedure required by law.

In addition, I recommend issuing the attached Secretary's Order to

effectuate this purpose and adopting the Hearing Officer's findings and

conclusions as expressed hereinabove.

/s/ Lisa A. Vest

Lisa A. Vest

Hearing Officer

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